

## Freeform Search

|   |  |
|---|--|
| <b>Database:</b>  | <div style="border: 1px solid black; padding: 2px;">         US Pre-Grant Publication Full-Text Database<br/>         US Patents Full-Text Database<br/>         US OCR Full-Text Database<br/>         EPO Abstracts Database<br/>         JPO Abstracts Database<br/>         Derwent World Patents Index<br/>         IBM Technical Disclosure Bulletins       </div> |
| <b>Term:</b>  | <div style="border: 1px solid black; padding: 2px;">         20030138772       </div>  |
| <b>Display:</b>   | <div style="border: 1px solid black; padding: 2px;">100</div> Documents in <b>Display Format:</b> <div style="border: 1px solid black; padding: 2px;">-</div> Starting with Number <div style="border: 1px solid black; padding: 2px;">1</div>   |
| <b>Generate:</b> <input type="radio"/> Hit List <input checked="" type="radio"/> Hit Count <input type="radio"/> Side by Side <input type="radio"/> Image |  |

Search

Clear

Interrupt

### Search History

DATE: Friday, November 18, 2005    [Printable Copy](#)    [Create Case](#)

| <u>Set Name</u><br>side by side | <u>Query</u>  | <u>Hit Count</u> | <u>Set Name</u><br>result set |
|---------------------------------|---|------------------|-------------------------------|
|                                 | DB=PGPB,USPT,USOC,EPAB,JPAB,DWPI,TDBD; PLUR=YES; OP=OR                      |                  |                               |
| <u>L13</u>                      | (TR\$ or ITR\$) near10 (chimeric or hybrid\$ or artificial) near10 capsid\$ | 5                | <u>L13</u>                    |
|                                 | DB=PGPB,USPT,EPAB,JPAB,DWPI,TDBD; PLUR=YES; OP=OR                           |                  |                               |
| <u>L12</u>                      | L11 and TR\$ near10 cap\$   | 2                | <u>L12</u>                    |
| <u>L11</u>                      | 20040180440   | 2                | <u>L11</u>                    |
| <u>L10</u>                      | 11 and rep near10 AAV2  | 1                | <u>L10</u>                    |
|                                 | DB=PGPB,USPT,USOC,EPAB,JPAB,DWPI,TDBD; PLUR=YES; OP=OR                      |                  |                               |
| <u>L9</u>                       | L1 and (AAV5 or AAV-5)  | 1                | <u>L9</u>                     |
| <u>L8</u>                       | L1 and (AAV1 or AAV-1)  | 1                | <u>L8</u>                     |
| <u>L7</u>                       | L1 and tissue   | 1                | <u>L7</u>                     |
| <u>L6</u>                       | L1 and therapeutic  | 1                | <u>L6</u>                     |
| <u>L5</u>                       | L1 and insect\$   | 1                | <u>L5</u>                     |
| <u>L4</u>                       | L1 and (adenovir\$ or helper or accessory)                                  | 1                | <u>L4</u>                     |
| <u>L3</u>                       | L1 and capsid\$   | 2                | <u>L3</u>                     |
|                                 | DB=PGPB,USPT,EPAB,JPAB,DWPI,TDBD; PLUR=YES; OP=OR                           |                  |                               |

L2    l1 and antibod\$  
L1    20030138772

1    L2  
2    L1

END OF SEARCH HISTORY

## Refine Search

### Search Results -

| Terms                          | Documents |
|--------------------------------|-----------|
| L11 and second near20 librar\$ | 2         |

Database:

US Pre-Grant Publication Full-Text Database  
 US Patents Full-Text Database  
 US OCR Full-Text Database  
 EPO Abstracts Database  
 JPO Abstracts Database  
 Derwent World Patents Index  
 IBM Technical Disclosure Bulletins

Search:

L17





### Search History

DATE: Friday, November 18, 2005   [Printable Copy](#)   [Create Case](#)

| <u>Set</u><br><u>Name</u><br>side by<br>side                  | <u>Query</u>  | <u>Hit</u><br><u>Count</u> | <u>Set</u><br><u>Name</u><br>result set |
|---|---|----------------------------|---|
| <i>DB=PGPB,USPT,USOC,EPAB,JPAB,DWPI,TDBD; PLUR=YES; OP=OR</i> |   |                            |   |
| <u>L17</u>  | L11 and second near20 librar\$  | 2                          | <u>L17</u>                              |
| <u>L16</u>  | L11 and second  | 2                          | <u>L16</u>                              |
| <u>L15</u>  | l11 and second near20 "not"   | 0                          | <u>L15</u>                              |
| <u>L14</u>  | l11 and second near10 "not"   | 0                          | <u>L14</u>                              |
| <u>L13</u>  | (TR\$ or ITR\$) near10 (chimeric or hybrid\$ or artificial) near10 capsid\$ | 5                          | <u>L13</u>                              |
| <i>DB=PGPB,USPT,EPAB,JPAB,DWPI,TDBD; PLUR=YES; OP=OR</i>      |   |                            |   |
| <u>L12</u>  | L11 and TR\$ near10 cap\$   | 2                          | <u>L12</u>                              |
| <u>L11</u>  | 20040180440   | 2                          | <u>L11</u>                              |
| <u>L10</u>  | l1 and rep near10 AAV2  | 1                          | <u>L10</u>                              |
| <i>DB=PGPB,USPT,USOC,EPAB,JPAB,DWPI,TDBD; PLUR=YES; OP=OR</i> |   |                            |   |
| <u>L9</u>   | L1 and (AAV5 or AAV-5)  | 1                          | <u>L9</u>                               |
| <u>L8</u>   | L1 and (AAV1 or AAV-1)  | 1                          | <u>L8</u>                               |

|  |  |   |           |
|--|--|---|-----------|
| <u>L7</u>  | L1 and tissue                              | 1 | <u>L7</u> |
| <u>L6</u>  | L1 and therapeutic                         | 1 | <u>L6</u> |
| <u>L5</u>  | L1 and insect\$                            | 1 | <u>L5</u> |
| <u>L4</u>  | L1 and (adenovir\$ or helper or accessory) | 1 | <u>L4</u> |
| <u>L3</u>  | L1 and capsid\$                            | 2 | <u>L3</u> |
| <i>DB=PGPB,USPT,EPAB,JPAB,DWPI,TDBD; PLUR=YES; OP=OR</i> |  |   |           |
| <u>L2</u>  | l1 and antibod\$                           | 1 | <u>L2</u> |
| <u>L1</u>  | 20030138772                                | 2 | <u>L1</u> |

END OF SEARCH HISTORY

| Set | Items | Description |
|-----|-------|-------------|
| --- | ----- | -----       |

? set hi ;set hi

HIGHLIGHT set on as ''

HIGHLIGHT set on as ''

? begin 5,6,55,154,155,156,312,399,biotech,biosci

| Set                            | Items   | Description   |
|--------------------------------|---|---|
| ? s                            | (AAV? or adeno (n) associated) and cap (5n) (hybrid? or chimeric) |   |
| Processed                      | 10 of 39 files  | ...   |
| Processing                     |   |   |
| Completed processing all files |   |   |
|                                | 20190   | AAV?  |
|                                | 64538   | ADENO   |
|                                | 8688626   | ASSOCIATED  |
|                                | 28103   | ADENO(N) ASSOCIATED   |
|                                | 190820  | CAP   |
|                                | 2398312   | HYBRID?   |
|                                | 229623  | CHIMERIC  |
|                                | 531   | CAP(5N) (HYBRID? OR CHIMERIC)                                     |
| S1                             | 41  | (AAV? OR ADENO (N) ASSOCIATED) AND CAP (5N) (HYBRID? OR CHIMERIC) |

? rd s1  
 >>>Duplicate detection is not supported for File 391.  
 >>>Records from unsupported files will be retained in the RD set.  
 ...completed examining records  
 S2 10 RD S1 (unique items)  
 ? s s2 not py>2002  
 >>>One or more prefixes are unsupported  
 >>> or undefined in one or more files.

10 S2  
 19607638 PY>2002  
 S3 6 S2 NOT PY>2002  
 ? d s3/3/1-6  
 Display 3/3/1 (Item 1 from file: 5)  
 DIALOG(R)File 5:Biosis Previews(R)  
 (c) 2005 BIOSIS. All rts. reserv.

0013099726 BIOSIS NO.: 200100271565  
 Recombinant adenovirus expressing **adeno-associated** virus cap  
 and rep proteins supports production of high-titer recombinant  
**adeno-associated** virus  
 AUTHOR: Zhang H-G; Wang Y M; Xie J F; Liang X; Hsu H-C; Zhang X; Douglas J;  
 Curiel D T; Mountz J D (Reprint)  
 AUTHOR ADDRESS: Department of Medicine, Division of Clinical Immunology and  
 Rheumatology, University of Alabama at Birmingham, 701 South 19th Street,  
 LHRB 473, Birmingham, AL, 35294, USA\*\*USA  
 JOURNAL: Gene Therapy 8 (9): p704-712 May, 2001 2001  
 MEDIUM: print  
 ISSN: 0969-7128  
 DOCUMENT TYPE: Article  
 RECORD TYPE: Abstract  
 LANGUAGE: English

- end of record -

? d s3/9/1-6  
 Display 3/9/1 (Item 1 from file: 5)  
 DIALOG(R)File 5:Biosis Previews(R)  
 (c) 2005 BIOSIS. All rts. reserv.

0013099726 BIOSIS NO.: 200100271565  
 Recombinant adenovirus expressing **adeno-associated** virus cap  
 and rep proteins supports production of high-titer recombinant  
**adeno-associated** virus  
 AUTHOR: Zhang H-G; Wang Y M; Xie J F; Liang X; Hsu H-C; Zhang X; Douglas J;  
 Curiel D T; Mountz J D (Reprint)  
 AUTHOR ADDRESS: Department of Medicine, Division of Clinical Immunology and  
 Rheumatology, University of Alabama at Birmingham, 701 South 19th Street,  
 LHRB 473, Birmingham, AL, 35294, USA\*\*USA  
 JOURNAL: Gene Therapy 8 (9): p704-712 May, 2001 2001  
 MEDIUM: print  
 ISSN: 0969-7128

DOCUMENT TYPE: Article  
RECORD TYPE: Abstract  
LANGUAGE: English

-more-

?

Display 3/9/1 (Item 1 from file: 5)

DIALOG(R)File 5:Biosis Previews(R)

(c) 2005 BIOSIS. All rts. reserv.

ABSTRACT: It has been difficult to produce a chimeric vector containing both Ad and **AAV** rep and **cap**, and to grow such **chimeric** vectors in 293 cells. By recombination in vitro in a bacterial host, we were able to produce recombinant plasmid AdAAV (pAdAAVrep-cap), which could be used to generate recombinant AdAAV (rAdAAVrep-cap) after transfection into 293 cells. A recombinant adenovirus, rAdAAVGFP, in which the green fluorescent protein (GFP) gene is flanked by the **AAV** terminal repeats cloned into the E1-deleted site of Ad was also generated. Co-infection of rAdAAVrep-cap together with rAdAAVGFP into 293 cells resulted in production of high titers of rAAV expressing GFP. It was noted that the titer of rAdAAVrep-cap was lower than the titer of control AdCM-VLacZ. The lower titer of rAdAAVrep-cap was associated with expression of Rep protein. Non-homologous recombination occurs after high passage and results in deletions within the **\*\*\*AAV\*\*\*** rep genes. These results indicate that (1) rAdAAVrep-cap can be produced; (2) rAdAAVrep-cap + rAdAAVGFP is a convenient and efficient way to transfect 293 cells to grow high titer rAAV; and (3) frozen stock is required to

-more-

?

Display 3/9/1 (Item 1 from file: 5)

DIALOG(R)File 5:Biosis Previews(R)

(c) 2005 BIOSIS. All rts. reserv.

avoid propagation of rep-deleted pAdAAVrep-cap.

#### DESCRIPTORS:

MAJOR CONCEPTS: Molecular Genetics--Biochemistry and Molecular Biophysics  
; Methods and Techniques

BIOSYSTEMATIC NAMES: Adenoviridae--dsDNA Viruses, Viruses, Microorganisms  
; Hominidae--Primates, Mammalia, Vertebrata, Chordata, Animalia;

Parvoviridae--ssDNA Viruses, Viruses, Microorganisms

ORGANISMS: adenovirus (Adenoviridae)--recombinant; 293 cell line  
(Hominidae); **adeno-associated** virus (Parvoviridae)--  
high-titer, recombinant

COMMON TAXONOMIC TERMS: Double-Stranded DNA Viruses; Animals; Chordates;  
Humans; Mammals; Primates; Vertebrates; Single-Stranded DNA Viruses;  
Microorganisms; Viruses

CHEMICALS & BIOCHEMICALS: cap protein; rep protein

GENE NAME: **adeno-associated** virus cap gene (Parvoviridae);

**adeno-associated** virus rep gene (Parvoviridae)

-more-

?

Display 3/9/1 (Item 1 from file: 5)

DIALOG(R)File 5:Biosis Previews(R)

(c) 2005 BIOSIS. All rts. reserv.

METHODS & EQUIPMENT: transfection--gene transfer method

#### CONCEPT CODES:

33506 Virology - Animal host viruses

02508 Cytology - Human

03502 Genetics - General

03508 Genetics - Human

31500 Genetics of bacteria and viruses

#### BIOSYSTEMATIC CODES:

03116 Adenoviridae

86215 Hominidae

03205 Parvoviridae

- end of record -

?

Display 3/9/2 (Item 2 from file: 5)  
DIALOG(R)File 5:Biosis Previews(R)  
(c) 2005 BIOSIS. All rts. reserv.

0012994988 BIOSIS NO.: 200100166827  
Monoclonal antibody specifically recognizing **adeno-associated**  
virus cap protein  
AUTHOR: Shimada Takashi (Reprint); Kuma Hidekazu; Suzuki Yosuke  
AUTHOR ADDRESS: Tokyo, Japan\*\*Japan  
JOURNAL: Official Gazette of the United States Patent and Trademark Office  
Patents 1236 (4): July 25, 2000 2000  
MEDIUM: e-file  
PATENT NUMBER: US 6093534 PATENT DATE GRANTED: July 25, 2000 20000725  
PATENT CLASSIFICATION: 435-5 PATENT ASSIGNEE: Hisamitsu Pharmaceutical  
Co., Inc., Saga, Japan PATENT COUNTRY: USA  
ISSN: 0098-1133  
DOCUMENT TYPE: Patent  
RECORD TYPE: Abstract  
LANGUAGE: English

-more-

?

Display 3/9/2 (Item 2 from file: 5)  
DIALOG(R)File 5:Biosis Previews(R)  
(c) 2005 BIOSIS. All rts. reserv.

ABSTRACT: A monoclonal antibody specifically recognizing **adeno-associated** virus **CAP** protein, which is produced by **hybridomas** obtained by fusing lymphocytes prepared from a mammal which has been immunized with the **adeno-associated** virus CAP protein or a recombinant thereof as an antigen with a myeloma cell line. The monoclonal antibody of the present invention is a novel antibody and capable of specifically recognizing the **adeno-associated** virus CAP protein. Thus, it is applicable to the detection of the **adeno-associated** virus and the purification of **adeno-associated** virus vectors for gene therapy.

DESCRIPTORS:

MAJOR CONCEPTS: Clinical Immunology--Human Medicine, Medical Sciences  
CHEMICALS & BIOCHEMICALS: **adeno-associated** virus cap protein; monoclonal antibody  
METHODS & EQUIPMENT: gene therapy--genetic method, recombinant gene expression applications

-more-

?

Display 3/9/2 (Item 2 from file: 5)  
DIALOG(R)File 5:Biosis Previews(R)  
(c) 2005 BIOSIS. All rts. reserv.  
CONCEPT CODES:  
00532 General biology - Miscellaneous

- end of record -

?

Display 3/9/3 (Item 3 from file: 5)  
DIALOG(R)File 5:Biosis Previews(R)  
(c) 2005 BIOSIS. All rts. reserv.

0011753004 BIOSIS NO.: 199900012664  
High-titer **adeno-associated** viral vectors from a Rep/Cap cell line and **hybrid** shuttle virus  
AUTHOR: Gao Guang-Ping; Qu Guang; Faust Lynn Z; Engdahl Ryan K; Xiao Weidong; Hughes Joseph V; Zoltick Philip W; Wilson James M (Reprint)  
AUTHOR ADDRESS: 204 Wistar Inst., 3601 Spruce St., Philadelphia, PA 19104-4268, USA\*\*USA  
JOURNAL: Human Gene Therapy 9 (16): p2353-2362 Nov. 1, 1998 1998  
MEDIUM: print  
ISSN: 1043-0342



DOCUMENT TYPE: Article  
RECORD TYPE: Abstract  
LANGUAGE: English

ABSTRACT: **Adeno-associated** virus (AAV) is a potential vector for in vivo gene therapy. A critical analysis of its utility has

-more-

?

Display 3/9/3 (Item 3 from file: 5)

DIALOG(R)File 5:Biosis Previews(R)

(c) 2005 BIOSIS. All rts. reserv.

been hampered by methods of production that are inefficient, difficult to scale up, and that often generate substantial quantities of replication-competent \*\*\*AAV\*\*\*. We describe a novel method for producing \*\*\*AAV\*\*\* that addresses these problems. A cell line, called B50, was created by stably transfecting into HeLa cells a rep/cap-containing plasmid utilizing endogenous \*\*\*AAV\*\*\* promoters. Production of \*\*\*AAV\*\*\* occurs in a two-step process. B50 is infected with an adenovirus defective in E2b, to induce Rep and Cap expression and provide helper functions, followed by a hybrid virus in which the AAV vector is cloned in the E1 region of a replication-defective adenovirus. This results in a 100-fold amplification and rescue of the AAV genome, leading to a high yield of recombinant AAV that is free of replication-competent \*\*\*AAV\*\*\*. Intramuscular injection of vector encoding erythropoietin into skeletal muscle of mice resulted in supraphysiologic levels of hormone in serum that was sustained and caused polycythemia. This method of \*\*\*AAV\*\*\* production should be useful in scaling up for studies in large animals, including humans.

-more-

?

Display 3/9/3 (Item 3 from file: 5)

DIALOG(R)File 5:Biosis Previews(R)

(c) 2005 BIOSIS. All rts. reserv.

REGISTRY NUMBERS: 11096-26-7: erythropoietin

DESCRIPTORS:

MAJOR CONCEPTS: Blood and Lymphatics--Transport and Circulation; Methods and Techniques; Molecular Genetics--Biochemistry and Molecular Biophysics

BIOSYSTEMATIC NAMES: Muridae--Rodentia, Mammalia, Vertebrata, Chordata, Animalia; Parvoviridae--ssDNA Viruses, Viruses, Microorganisms

ORGANISMS: mouse (Muridae)--animal model; B50 cell line (Muridae); **adeno-associated** virus (Parvoviridae)--gene vector, intramuscular administration

COMMON TAXONOMIC TERMS: Animals; Chordates; Mammals; Nonhuman Vertebrates; Nonhuman Mammals; Rodents; Vertebrates; Single-Stranded DNA Viruses; Microorganisms; Viruses

DISEASES: polycythemia--blood and lymphatic disease

MESH TERMS: Polycythemia (MeSH)

CHEMICALS & BIOCHEMICALS: erythropoietin--serum; Cap; Rep

-more-

?

Display 3/9/3 (Item 3 from file: 5)

DIALOG(R)File 5:Biosis Previews(R)

(c) 2005 BIOSIS. All rts. reserv.

METHODS & EQUIPMENT: **adeno-associated** viral vector production  
--genetic method; gene therapy--therapeutic method

CONCEPT CODES:

31500 Genetics of bacteria and viruses

02506 Cytology - Animal

03506 Genetics - Animal

10060 Biochemistry studies - General

12512 Pathology - Therapy

15001 Blood - General and methods

BIOSYSTEMATIC CODES:

. 86375 Muridae  
03205 Parvoviridae

- end of record -

?

Display 3/9/4 (Item 4 from file: 5)  
DIALOG(R)File 5:Biosis Previews(R)  
(c) 2005 BIOSIS. All rts. reserv.

0007096551 BIOSIS NO.: 199089014442

CONSTRUCTION OF A RECOMBINANT HUMAN PARVOVIRUS B19 **ADENO-ASSOCIATED** VIRUS 2 **AAV** DNA INVERTED TERMINAL REPEATS ARE FUNCTIONAL IN AN **AAV**-B19 HYBRID VIRUS

AUTHOR: SRIVASTAVA C H (Reprint); SAMULSKI R J; LU L; LARSEN S H;  
SRIVASTAVA A

AUTHOR ADDRESS: DEP MICROBIOL AND IMMUNOL, INDIANA UNIV SCH OF MED, 635  
BARNHILL DRIVE, INDIANAPOLIS, INDIANA 46202, USA\*\*USA

JOURNAL: Proceedings of the National Academy of Sciences of the United  
States of America 86 (20): p8078-8082 1989

ISSN: 0027-8424

DOCUMENT TYPE: Article

RECORD TYPE: Abstract

LANGUAGE: ENGLISH

ABSTRACT: To facilitate genetic analysis of the human pathogenic parvovirus

-more-

?

Display 3/9/4 (Item 4 from file: 5)  
DIALOG(R)File 5:Biosis Previews(R)  
(c) 2005 BIOSIS. All rts. reserv.

B19, we constructed a hybrid B19 viral genome in which the defective B19 inverted terminal repeats were replaced with the full-length inverted terminal repeats from a nonpathogenic human parvovirus, the **adeno-**

**\*\*\*associated\*\*\*** virus 2 ( **\*\*\*AAV\*\*\*** ). The hybrid **\*\*\*AAV\*\*\*** -B19 genome was rescued from a recombinant plasmid and then the DNA was replicated upon transfection into adenovirus 2-infected human KB cells in the presence of **AAV** genes coding for proteins required for **AAV** DNA replication ( **\*\*\*AAV\*\*\*** -Rep proteins). In addition, in the presence of **AAV** genes coding for the viral capsid proteins (**AAV-Cap** proteins), the rescued/replicated **hybrid AAV**-B19 genomes were packaged into mature **AAV** progeny virions, which were subsequently released into culture supernatants. The recombinant **\*\*\*AAV\*\*\*** -B19 progeny virions were infectious for normal human bone marrow cells and strongly suppressed erythropoiesis in vitro. The availability of an infectious recombinant B19 virus should facilitate the mutational analysis of the viral genome, which, in turn, may yield information on individual viral gene functions in B19-induced pathogenesis. The hybrid **\*\*\*AAV\*\*\*** -B19

-more-

?

Display 3/9/4 (Item 4 from file: 5)  
DIALOG(R)File 5:Biosis Previews(R)  
(c) 2005 BIOSIS. All rts. reserv.

genome may also prove to be a useful vector for gene transfer in human bone marrow cells.

DESCRIPTORS: BONE MARROW CELLS ERYTHROPOIESIS GENE TRANSFER VECTOR

DESCRIPTORS:

MAJOR CONCEPTS: Biochemistry and Molecular Biophysics; Blood and Lymphatics--Transport and Circulation; Cell Biology; Genetics; Microbiology

BIOSYSTEMATIC NAMES: Hominidae--Primates, Mammalia, Vertebrata, Chordata, Animalia

COMMON TAXONOMIC TERMS: Animals; Chordates; Humans; Mammals; Primates; Vertebrates

CONCEPT CODES:

02508 Cytology - Human

. 03508 Genetics - Human  
10052 Biochemistry methods - Nucleic acids, purines and pyrimidines  
10062 Biochemistry studies - Nucleic acids, purines and pyrimidines

-more-

?

Display 3/9/4 (Item 4 from file: 5)  
DIALOG(R)File 5:Biosis Previews(R)  
(c) 2005 BIOSIS. All rts. reserv.  
10506 Biophysics - Molecular properties and macromolecules  
15004 Blood - Blood cell studies  
15008 Blood - Lymphatic tissue and reticuloendothelial system  
31500 Genetics of bacteria and viruses  
33506 Virology - Animal host viruses  
BIOSYSTEMATIC CODES:  
86215 Hominidae

- end of record -

?

Display 3/9/5 (Item 1 from file: 399)  
DIALOG(R)File 399:CA SEARCH(R)  
(c) 2005 American Chemical Society. All rts. reserv.  
  
130292438 CA: 130(22)292438q PATENT  
Chimeric AAV/B19 parvovirus-based recombinant vector system specifically  
targeting the erythroid lineage  
INVENTOR(AUTHOR): Srivastava, Arun; Ponnazhagan, Selvarangan  
LOCATION: USA  
ASSIGNEE: Advanced Research and Technology Institute  
PATENT: PCT International ; WO 9918227 A1 DATE: 19990415  
APPLICATION: WO 98US21202 (19981008) \*US 61364 (19971008)  
PAGES: 76 pp. CODEN: PIXXD2 LANGUAGE: English CLASS: C12N-015/86A;  
C12N-015/35B; C12N-007/01B DESIGNATED COUNTRIES: AL; AM; AT; AU; AZ; BA;  
BB; BG; BR; BY; CA; CH; CN; CU; CZ; DE; DK; EE; ES; FI; GB; GE; GH; GM; HR;  
HU; ID; IL; IS; JP; KE; KG; KP; KR; KZ; LC; LK; LR; LS; LT; LU; LV; MD; MG;  
MK; MN; MW; MX; NO; NZ; PL; PT; RO; RU; SD; SE; SG; SI; SK; SL; TJ; TM; TR;  
TT; UA; UG; US; UZ; VN; YU; ZW; AM; AZ; BY; KG; KZ; MD; RU; TJ; TM  
DESIGNATED REGIONAL: GH; GM; KE; LS; MW; SD; SZ; UG; ZW; AT; BE; CH; CY;  
DE; DK; ES; FI; FR; GB; GR; IE; IT; LU; MC; NL; PT; SE; BF; BJ; CF; CG; CI;

-more-

?

Display 3/9/5 (Item 1 from file: 399)  
DIALOG(R)File 399:CA SEARCH(R)  
(c) 2005 American Chemical Society. All rts. reserv.  
CM; GA; GN; GW; ML; MR; NE; SN; TD; TG  
SECTION:  
CA203002 Biochemical Genetics  
CA210XXX MICROBIAL, ALGAL, AND FUNGAL BIOCHEMISTRY  
IDENTIFIERS: AAV B19 parvovirus vector chimera cloning gene therapy,  
sequence AAV promoter vector chimera  
DESCRIPTORS:  
Hemoglobins...  
 $\alpha$ ,  $\beta$ , and  $\gamma$  chain cloning and gene therapy; chimeric  
AAV/B19 parvovirus-based recombinant vector system specifically  
targeting the erythroid lineage  
c-myc gene(animal)... c-myc gene(animal)... c-src gene(animal)...  
Oncogenes(animal)... ras gene(animal)...  
antisense RNA to; for gene therapy; chimeric AAV/B19 parvovirus-based  
recombinant vector system specifically targeting the erythroid lineage  
Capsid...  
B19; chimeric AAV/B19 parvovirus-based recombinant vector system

-more-

?

Display 3/9/5 (Item 1 from file: 399)  
DIALOG(R)File 399:CA SEARCH(R)  
(c) 2005 American Chemical Society. All rts. reserv.

specifically targeting the erythroid lineage  
Genes(microbial)...  
cap, B19; chimeric AAV/B19 parvovirus-based recombinant vector system  
specifically targeting the erythroid lineage  
Adeno-associated virus... Bone marrow... B19 virus... DNA sequences...  
Enhancer(genetic element)... Erythroid precursor cell... Gene therapy...  
Heart... Molecular cloning... Monocyte... Transformation(genetic)...  
Vascular endothelium... Virus vectors...  
chimeric AAV/B19 parvovirus-based recombinant vector system  
specifically targeting the erythroid lineage  
Antisense RNA... Interleukin 10... Interleukin 11... Interleukin 1...  
Interleukin 2... Interleukin 3... Interleukin 4... Interleukin 5...  
Interleukin 6... Interleukin 7... Interleukin 8... Interleukin 9...  
p53(protein)... Rb protein... Stem cell factor... Tumor necrosis factors...  
cloning and gene therapy; chimeric AAV/B19 parvovirus-based recombinant  
vector system specifically targeting the erythroid lineage  
Promoter(genetic element)...

-more-

?

Display 3/9/5 (Item 1 from file: 399)  
DIALOG(R)File 399:CA SEARCH(R)  
(c) 2005 American Chemical Society. All rts. reserv.  
CMV IE, LTR, SV40 IE, HSV tk,  $\beta$ -actin, b19p6, or human globin;  
chimeric AAV/B19 parvovirus-based recombinant vector system  
specifically targeting the erythroid lineage  
Genes(animal)...  
erb; antisense RNA to; for gene therapy; chimeric AAV/B19  
parvovirus-based recombinant vector system specifically targeting the  
erythroid lineage  
Proteins(specific proteins and subclasses)...  
p21, cloning and gene therapy; chimeric AAV/B19 parvovirus-based  
recombinant vector system specifically targeting the erythroid lineage  
Genes(animal)...  
raf, antisense RNA to; for gene therapy; chimeric AAV/B19  
parvovirus-based recombinant vector system specifically targeting the  
erythroid lineage  
Genes(microbial)...  
rep, AAV; chimeric AAV/B19 parvovirus-based recombinant vector system  
specifically targeting the erythroid lineage

-more-

?

Display 3/9/5 (Item 1 from file: 399)  
DIALOG(R)File 399:CA SEARCH(R)  
(c) 2005 American Chemical Society. All rts. reserv.  
Inverted repeat(DNA)...  
terminal; chimeric AAV/B19 parvovirus-based recombinant vector system  
specifically targeting the erythroid lineage  
Genes(microbial)...  
VP1, B19; chimeric AAV/B19 parvovirus-based recombinant vector system  
specifically targeting the erythroid lineage  
CAS REGISTRY NUMBERS:  
9004-10-8P biological studies, cloning and gene therapy; chimeric AAV/B19  
parvovirus-based recombinant vector system specifically targeting the  
erythroid lineage  
9014-00-0P 9026-93-1P 9027-80-9P 83869-56-1P cloning and gene therapy;  
chimeric AAV/B19 parvovirus-based recombinant vector system  
specifically targeting the erythroid lineage  
223121-09-3 nucleotide sequence; chimeric AAV/B19 parvovirus-based  
recombinant vector system specifically targeting the erythroid lineage  
1404-04-2 resistance; cloning and gene therapy; chimeric AAV/B19  
parvovirus-based recombinant vector system specifically targeting the

-more-

?

Display 3/9/5 (Item 1 from file: 399)  
DIALOG(R)File 399:CA SEARCH(R)

(c) 2005 American Chemical Society. All rts. reserv.  
erythroid lineage

- end of record -

?

Display 3/9/6 (Item 1 from file: 357)  
DIALOG(R)File 357:Derwent Biotech Res.  
(c) 2005 Thomson Derwent & ISI. All rts. reserv.

0203939 DBR Accession Number: 96-14710 PATENT  
Monoclonal antibody specific for **adeno-associated** virus CAP  
protein - by hybridoma cell culture for adeno helper virus detection  
and gene therapy  
AUTHOR: Shimada T; Kuma H; Suzuki Y  
CORPORATE SOURCE: Saga, Japan.  
PATENT ASSIGNEE: Hisamitsu-Pharm. 1996  
PATENT NUMBER: WO 9629349 PATENT DATE: 960926 WPI ACCESSION NO.:  
96-443139 (9644)  
PRIORITY APPLIC. NO.: JP 9559149 APPLIC. DATE: 950317  
NATIONAL APPLIC. NO.: WO 96JP655 APPLIC. DATE: 960315  
LANGUAGE: JA  
ABSTRACT: A monoclonal antibody (MAb) specific for **adeno-**  
**associated** virus (**AAV**) vector CAP protein is new and is  
produced by a hybridoma formed by the fusion of lymphocytes from  
mammals immunized with a recombinant **AAV** CAP protein, and a

-more-

?

Display 3/9/6 (Item 1 from file: 357)  
DIALOG(R)File 357:Derwent Biotech Res.  
(c) 2005 Thomson Derwent & ISI. All rts. reserv.  
myeloma cell. Also claimed is and a method for producing recombinant  
\*\*\*AAV\*\*\* CAP protein. The MAb may be used to detect adeno helper virus  
and may be used in gene therapy. In an example, the spleens of mice  
immunized with WA0322-1 were removed and washed first in phosphate  
buffer containing kanamycin, and then in RPMI 1640 medium, after which  
the cells were prepared for hybridization. Spleen cells and mouse  
myeloma cells P3-X63-Ag8.U1 (P3U1) were mixed in a ratio of 5:1, and  
after the medium was removed, 1 ml of PEG-400 was added and incubated  
at 37 deg for 2 min. The cells were then washed in RPMI 1640 medium and  
resuspended in HAT medium. The cells were placed in wells and incubated  
for 7 days with the addition of extra HAT medium after 3 days. The  
supernatant was tested for reaction to WA0322-1 by ELISA and positive  
cells were taken for primary cloning. 7 Hybridoma lines were obtained  
(1E7, 1E9, 1G5, 1G12, 2H7, 2H9 and 3E7). (128pp)  
DESCRIPTORS: recombinant **adeno-associated** virus vector  
\*\*\*CAP\*\*\* monoclonal antibody prepare, \*\*\*hybridoma\*\*\* cell culture,  
appl. adeno virus helper virus determine, gene therapy parvo virus antibody

-more-

?

Display 3/9/6 (Item 1 from file: 357)  
DIALOG(R)File 357:Derwent Biotech Res.  
(c) 2005 Thomson Derwent & ISI. All rts. reserv.  
engineering (Vol.15, No.25)  
SECTION: PHARMACEUTICALS-Antibodies; GENETIC ENGINEERING AND FERMENTATION-  
Nucleic Acid Technology; CELL CULTURE-Animal Cell Culture (D6,A1,J1)

- end of record -

?

? s VP1 (5n) different (5n) (VP2 or VP3)  
21538 VP1  
11158935 DIFFERENT  
13550 VP2  
8603 VP3  
S4 173 VP1 (5N) DIFFERENT (5N) (VP2 OR VP3)  
? s s4 and AAV?  
173 S4

20190 AAV?

S5 1 S4 AND AAV?

? d s5/9/1

Display 5/9/1 (Item 1 from file: 357)

DIALOG(R)File 357:Derwent Biotech Res.

(c) 2005 Thomson Derwent & ISI. All rts. reserv.

0247255 DBR Accession Number: 2000-01745

Chimeric virus-like particle formation of adeno-associated virus - the capsids of which are composed of three proteins, VP1, VP2, and VP3

AUTHOR: Hoque M; Shimizu N; Ishizu K; Yajima H; Arisaki F; Suzuki K; Watanabe H; +Handa H

CORPORATE AFFILIATE: Tokyo-Inst.Technol. Nat.Inst.Infec.Dis.Tokyo

CORPORATE SOURCE: Frontier Collaborative Research Laboratory, Tokyo

Institute of Technology, 4259 Nagatsuta-cho, Midori-ku, Yokohama,

226-8501, Japan. email:hhanda@bio.titech.ac.jp

JOURNAL: Biochem.Biophys.Res.Commun. (266, 2, 371-76) 1999

ISSN: 0006-291X CODEN: BBRC A9

LANGUAGE: English

ABSTRACT: Adeno-associated virus (AAV) capsids are composed of three proteins, VP1, VP2, and VP3 which have a common amino acid sequence, being expressed from different initiation codons on the same open reading frame. Although VP1 is necessary for viral

-more-

?

Display 5/9/1 (Item 1 from file: 357)

DIALOG(R)File 357:Derwent Biotech Res.

(c) 2005 Thomson Derwent & ISI. All rts. reserv.

infection, it is not essential for capsid formation. The capsid proteins VP2 and VP3 are sufficient for capsid formation, but their functions are poorly understood. To investigate the roles of the capsid proteins in capsid formation, a baculo virus protein expression system was used to produce virus-like particles (VLPs). Varying the ratios of VP2 and VP3 did not affect VLP formation. Further, their physical properties were equivalent to those of empty wild-type particles. The function of VP3 was studied by fusing a peptide tag, FLAG, to its N-terminus. This chimeric viral protein, in combination with VP2, could assemble into VLPs, indicating that the chimerism of VP3 did not affect the VLP formation. It may be possible to utilize \*\*\*AAV\*\*\* VLP as vectors of a broad range of drugs since the fusion of the VP3 N-terminus with defined molecules could impose distinct physical properties onto the internal environment of the VLP. (21 ref)

DESCRIPTORS: 'adeno-associated' virus, capsid formation, baculo virus protein expression system, virus-like particle chimerism, appl. drug delivery parvo virus gene therapy (Vol.19, No.4)

-more-

?

Display 5/9/1 (Item 1 from file: 357)

DIALOG(R)File 357:Derwent Biotech Res.

(c) 2005 Thomson Derwent & ISI. All rts. reserv.

SECTION: PHARMACEUTICALS-Clinical Genetic Techniques; GENETIC ENGINEERING AND FERMENTATION-Nucleic Acid Technology (D7,A1)

- end of record -

? s s4 and adeno

173 S4

64538 ADENO

S6 3 S4 AND ADENO

? d s6/9/1-3

Display 6/9/1 (Item 1 from file: 24)

DIALOG(R)File 24:CSA Life Sciences Abstracts

(c) 2005 CSA. All rts. reserv.

0001530716 IP ACCESSION NO: 3792318

The recognition of parvovirus capsids by antibodies

Agbandje, M; Parrish, CR; Rossmann, MG  
Dep. Biol. Sci., Purdue University, West Lafayette, IN 47907-1392, USA

Seminars in Virology, v 6, n 4, p 219-231, 1995  
ADDL. SOURCE INFO: Seminars in Virology [SEMIN. VIROL.], volume 6, number 4, pp.  
219-231, 1995  
PUBLICATION DATE: 1995

DOCUMENT TYPE: Journal Article  
RECORD TYPE: Abstract  
LANGUAGE: English  
SUMMARY LANGUAGE: English  
ISSN: 1044-5773

-more-

?

Display 6/9/1 (Item 1 from file: 24)  
DIALOG(R)File 24:CSA Life Sciences Abstracts  
(c) 2005 CSA. All rts. reserv.  
FILE SEGMENT: Virology & AIDS Abstracts; Immunology Abstracts

#### ABSTRACT:

The parvoviruses are small, non-enveloped icosahedral viruses which infect many animals, including vertebrates and arthropods. Vertebrate parvoviruses can be classified into the autonomous and the **adeno**-associated viruses; the autonomous parvoviruses have been examined in detail for antigenic structure. The protective immunity against parvoviruses in animals appears to be primarily antibody-mediated. The capsid of the autonomous parvoviruses is assembled from two proteins, VP1 and VP2, which overlap in sequence, with VP1 having additional N-terminal residues. Empty capsids can be assembled from VP2 alone. The structures of canine parvovirus (CPV) and feline panleukopenia virus (FPV) have been solved to better than 3.5 angstrom resolution, and the structure of human parvovirus, B19, has been solved to 8 angstrom resolution. In each case the T = 1 icosahedron is made up to 60 copies of a structural motif common to VP1 and VP2, consisting of an eight-stranded anti-parallel beta -barrel.

-more-

?

Display 6/9/1 (Item 1 from file: 24)  
DIALOG(R)File 24:CSA Life Sciences Abstracts  
(c) 2005 CSA. All rts. reserv.  
The surface of the capsid is made up primarily of large elaborate loops which connect the beta -strands that make up the barrel. Antigenic epitopes have been mapped utilizing escape mutants, natural variants, peptide analysis and by expression of viral proteins. In CPV two major antigenic determinants were defined by escape mutant analysis, while peptide analysis revealed antigenic determinants in many **different** regions of the capsid protein, including the amino terminus of **\*\*\*VP2\*\*\***. Neutralizing epitopes of B19 were found by peptide analysis in the **VP1**-unique region and in sequences common to **\*\*\*VP1\*\*\*** and **\*\*\*VP2\*\*\***. Other antigenic, but non-neutralizing, epitopes were found in the **VP1-VP2** junction, as well as various other parts of the **\*\*\*VP2\*\*\*** protein. The binding of an Fab derived from one neutralizing anti-CPV Mab has been examined by cryo-electron microscopy image reconstruction, that showed 60 copies of the Fab were bound per virion. The Fab footprint covered approximately 796 angstrom super(2) of the capsid surface, in a region where escape mutations to that Mab previously had been shown to cluster. The mechanism of neutralization was not clear, but could involve

-more-

?

Display 6/9/1 (Item 1 from file: 24)  
DIALOG(R)File 24:CSA Life Sciences Abstracts  
(c) 2005 CSA. All rts. reserv.  
interference with cell attachment, cell entry or uncoating during the process of cell infection.

DESCRIPTORS: antibodies; capsids; parvovirus  
SUBJ CATG: 22093, Antigen-antibody interaction; 06002, Viruses

- end of record -

?

Display 6/9/2 (Item 1 from file: 34)  
DIALOG(R)File 34:SciSearch(R) Cited Ref Sci  
(c) 2005 Inst for Sci Info. All rts. reserv.

04293534 Genuine Article#: RU694 Number of References: 49  
Title: THE RECOGNITION OF PARVOVIRUS CAPSIDS BY ANTIBODIES  
Author(s): AGBANDJE M; PARRISH CR; ROSSMANN MG  
Corporate Source: PURDUE UNIV, DEPT BIOL SCI/W LAFAYETTE//IN/47907; CORNELL  
UNIV, NEW YORK STATE COLL VET MED, JAMES A BAKER INST ANIM  
HLTH/ITHACA//NY/14853  
Journal: SEMINARS IN VIROLOGY, 1995, V6, N4 (AUG), P219-231  
ISSN: 1044-5773  
Language: ENGLISH Document Type: ARTICLE  
Geographic Location: USA  
Subfile: SciSearch; CC LIFE--Current Contents, Life Sciences  
Journal Subject Category: VIROLOGY  
Abstract: The parvoviruses are small, non-enveloped icosahedral viruses  
which infect many animals, including vertebrates and arthropods.  
Vertebrate parvoviruses can be classified into the autonomous and the  
**adeno**-associated viruses; the autonomous parvoviruses have been

-more-

?

Display 6/9/2 (Item 1 from file: 34)  
DIALOG(R)File 34:SciSearch(R) Cited Ref Sci  
(c) 2005 Inst for Sci Info. All rts. reserv.  
examined in detail for antigenic structure. The protective immunity  
against parvoviruses in animals appears to be primarily to  
antibody-mediated. The capsid of the autonomous parvoviruses is  
assembled from two proteins, VP1 and VP2, which overlap in sequence,  
with VP1 having additional N-terminal residues. Empty capsids can be  
assembled from VP2 alone.

The structures of canine parvovirus (CPV) and feline panleukopenia  
virus (FPV) have been solved to better than 3.5 Angstrom resolution,  
and the structure of human parvovirus; B19, has been solved to 8  
Angstrom resolution. In each case the T = 1 icosahedron is made up of  
60 copies of a structural motif common to VP1 and VP2, consisting of an  
eight-stranded anti-parallel beta-barrel. The surface of the capsid is  
made up primarily of large elaborate loops which connect the  
beta-strands that make up the barrel. Antigenic epitopes have been  
mapped utilizing escape mutants, natural variants, peptide analysis and  
by expression of viral proteins. In CPV two major antigenic

-more-

?

Display 6/9/2 (Item 1 from file: 34)  
DIALOG(R)File 34:SciSearch(R) Cited Ref Sci  
(c) 2005 Inst for Sci Info. All rts. reserv.  
determinants were defined by escape mutant analysis, while peptide  
analysis revealed antigenic determinants in many **different**  
regions of the capsid protein, including the amino terminus of  
\*\*\*VP2\*\*\* . Neutralizing epitopes of B19 were found by peptide analysis  
in the **VP1**-unique region and in sequences common to VP1 and  
\*\*\*VP2\*\*\* . Other antigenic, but non-neutralizing; epitopes were found  
in the **VP1-VP2** junction, as well as various other parts of  
the \*\*\*VP2\*\*\* protein.

The binding of an Fab derived from one neutralizing anti-CPV Mab  
has been examined by cryo-electron microscopy image reconstruction that  
showed 60 copies of the Fab were bound per virion. The Fab footprint  
covered approximately 736 Angstrom(2) of the capsid surface, in a  
region where escape mutations to that Mab previously had been shown to



cluster: The mechanism of neutralization was not clear but could involve interference with cell attachment, cell entry or uncoating during the process of cell infection.

-more-

?

Display 6/9/2 (Item 1 from file: 34)  
DIALOG(R)File 34:SciSearch(R) Cited Ref Sci  
(c) 2005 Inst for Sci Info. All rts. reserv.  
Descriptors--Author Keywords: PARVOVIRUSES ; ANTIGENIC EPITOPES ; X-RAY ;  
CRYSTALLOGRAPHY  
Identifiers--KeyWords Plus: B-CELL EPITOPES; CANINE PARVOVIRUS;  
3-DIMENSIONAL STRUCTURE; MONOCLONAL-ANTIBODY; PROTEIN STRUCTURES;  
SURFACE; REGION; VIRUS; SEQUENCE; IDENTIFICATION  
Research Fronts: 93-0090 002 (ANGSTROM RESOLUTION; REFINED  
CRYSTAL-STRUCTURE; ESCHERICHIA-COLI HISTIDINE-CONTAINING PHOSPHOCARRIER  
PROTEIN HPR)  
93-0763 001 (SYNTHETIC PEPTIDE COMBINATORIAL LIBRARIES; EXPRESSION OF  
IMMUNOGLOBULIN FAB FRAGMENTS; BUILDING ANTIBODIES)  
93-0785 001 (PARVOVIRUS B19 INFECTION; POLYMERASE CHAIN-REACTION; RAPID  
DETECTION)  
93-0967 001 (PROTEIN FOLDING; STRUCTURAL ENERGETICS OF THE MOLTEN  
GLOBULE STATE; HYDROPHOBIC CORE; SIMILAR THERMODYNAMIC STABILITY)  
93-3786 001 (CAPSID PROTEIN; RNA VIRUSES; TEMPERATURE-SENSITIVE  
MUTATIONS)  
Cited References:

-more-

?

Display 6/9/2 (Item 1 from file: 34)  
DIALOG(R)File 34:SciSearch(R) Cited Ref Sci  
(c) 2005 Inst for Sci Info. All rts. reserv.  
AGBANDJE M, 1993, V16, P155, PROTEINS  
AGBANDJE M, 1994, V203, P106, VIROLOGY  
ANDERSON LJ, 1989, V321, P536, NEW ENGL J MED  
BACON D, 1988, V6, P219, J MOL GRAPHICS  
BARBIS DP, 1992, V191, P301, VIROLOGY  
BERNS KI, 1990, P1743, VIROLOGY  
BROWN CS, 1992, V66, P6989, J VIROL  
BROWN CS, 1994, V198, P477, VIROLOGY  
CHANG SF, 1992, V66, P6858, J VIROL  
CHAPMAN MS, 1993, V2, P459, PROTEIN SCI  
CHAPMAN MS, 1993, V194, P491, VIROLOGY  
CHAPMAN MS, 1993, V194, P491, VIROLOGY  
CORTES E, 1993, V74, P2005, J GEN VIROL  
COTMORE SF, 1987, V33, P91, ADV VIRUS RES  
DAVIES DR, 1988, V263, P541, J BIOL CHEM  
DETURISO JAL, 1991, V72, P2445, J GEN VIROL  
HARTMAN AB, 1988, V141, P932, J IMMUNOL

-more-

?

Display 6/9/2 (Item 1 from file: 34)  
DIALOG(R)File 34:SciSearch(R) Cited Ref Sci  
(c) 2005 Inst for Sci Info. All rts. reserv.  
ICENOGL J, 1983, V127, P412, VIROLOGY  
JONES TA, 1991, V47, P110, ACTA CRYSTALLOGR A  
JONGENEEL CV, 1986, V59, P564, J VIROL  
KAJIGAYA S, 1991, V88, P4646, P NATL ACAD SCI USA  
KRAULIS PJ, 1991, V24, P946, J APPL CRYSTALLOGR  
KURTZMAN G, 1989, V321, P519, NEW ENGL J MED  
LANGEVELD JPM, 1993, V67, P765, J VIROL  
LANGEVELD JPM, 1994, V68, P4506, J VIROL  
LEE B, 1971, V55, P379, J MOL BIOL  
MIYAMURA K, 1994, V91, P8507, P NATL ACAD SCI USA  
PARRISH CR, 1991, V65, P6544, J VIROL  
PARRISH CR, 1988, V163, P230, VIROLOGY  
PATTISON JR, 1990, P1765, VIROLOGY

RIMMELZWAAN GF, 1990, V71, P2741, J GEN VIROL  
ROSENFELD SJ, 1992, V89, P2023, J CLIN INVEST  
ROSSMANN MG, 1989, V58, P533, ANNU REV BIOCHEM  
ROSSMANN MG, 1988, V164, P373, VIROLOGY

-more-

?

Display 6/9/2 (Item 1 from file: 34)  
DIALOG(R)File 34:SciSearch(R) Cited Ref Sci  
(c) 2005 Inst for Sci Info. All rts. reserv.  
SATO H, 1991, V65, P1667, J VIROL  
SATO H, 1991, V65, P5485, J VIROL  
SHERIFF S, 1987, V84, P8075, P NATL ACAD SCI USA  
SMITH TJ, 1990, V23, P141, J APPL CRYSTALLOGR  
SMITH TJ, 1993, V67, P1148, J VIROL  
SMITH TJ, 1993, V90, P7015, P NATL ACAD SCI USA  
STRASSHEIM ML, 1994, V198, P175, VIROLOGY  
STUDDARD MJ, 1990, P27, HDB PARVOVIRUSES  
TATTERSALL P, 1980, P123, HDB PARVOVIRUSES  
TRUYEN U, 1994, V200, P494, VIROLOGY  
TSAO J, 1991, V251, P1456, SCIENCE  
WIKOFF WR, 1994, V2, P595, STRUCTURE  
WILSON IA, 1993, V3, P113, CURR OPIN STRUC BIOL  
WU H, 1993, V233, P231, J MOL BIOL  
YOSHIMOTO K, 1991, V65, P7056, J VIROL

- end of record -

?

Display 6/9/3 (Item 1 from file: 357)  
DIALOG(R)File 357:Derwent Biotech Res.  
(c) 2005 Thomson Derwent & ISI. All rts. reserv.

0247255 DBR Accession Number: 2000-01745  
Chimeric virus-like particle formation of **adeno**-associated virus -  
the capsids of which are composed of three proteins, VP1, VP2, and VP3  
AUTHOR: Hoque M; Shimizu N; Ishizu K; Yajima H; Arisaki F; Suzuki K;  
Watanabe H; +Handa H  
CORPORATE AFFILIATE: Tokyo-Inst.Technol. Nat.Inst.Infec.Dis.Tokyo  
CORPORATE SOURCE: Frontier Collaborative Research Laboratory, Tokyo  
Institute of Technology, 4259 Nagatsuta-cho, Midori-ku, Yokohama,  
226-8501, Japan. email:hhanda@bio.titech.ac.jp  
JOURNAL: Biochem.Biophys.Res.Comm. (266, 2, 371-76) 1999  
ISSN: 0006-291X CODEN: BBRCA9  
LANGUAGE: English  
ABSTRACT: **Adeno**-associated virus (AAV) capsids are composed of three  
proteins, **VP1**, **VP2**, and **VP3** which have a common amino  
acid sequence, being expressed from **different** initiation codons  
on the same open reading frame. Although VP1 is necessary for viral

-more-

?

Display 6/9/3 (Item 1 from file: 357)  
DIALOG(R)File 357:Derwent Biotech Res.  
(c) 2005 Thomson Derwent & ISI. All rts. reserv.  
infection, it is not essential for capsid formation. The capsid  
proteins VP2 and VP3 are sufficient for capsid formation, but their  
functions are poorly understood. To investigate the roles of the capsid  
proteins in capsid formation, a baculo virus protein expression system  
was used to produce virus-like particles (VLPs). Varying the ratios of  
VP2 and VP3 did not affect VLP formation. Further, their physical  
properties were equivalent to those of empty wild-type particles. The  
function of VP3 was studied by fusing a peptide tag, FLAG, to its  
N-terminus. This chimeric viral protein, in combination with VP2, could  
assemble into VLPs, indicating that the chimerism of VP3 did not affect  
the VLP formation. It may be possible to utilize AAV VLP as vectors of  
a broad range of drugs since the fusion of the VP3 N-terminus with  
defined molecules could impose distinct physical properties onto the  
internal environment of the VLP. (21 ref)

DESCRIPTORS: **adeno**-associated virus, capsid formation, baculo virus  
protein expression system, virus-like particle chimerism, appl. drug  
delivery parvo virus gene therapy (Vol.19, No.4)

-more-

?

Display 6/9/3 (Item 1 from file: 357)

DIALOG(R)File 357:Derwent Biotech Res.

(c) 2005 Thomson Derwent & ISI. All rts. reserv.

SECTION: PHARMACEUTICALS-Clinical Genetic Techniques; GENETIC ENGINEERING  
AND FERMENTATION-Nucleic Acid Technology (D7,A1)

- end of record -

? e au=zolotukhin, sergei

| Ref | Items | Index-term                        |
|-----|-------|-----------------------------------|
| E1  | 3     | AU=ZOLOTUKHIN, SB                 |
| E2  | 49    | *AU=ZOLOTUKHIN, SERGEI            |
| E3  | 1     | AU=ZOLOTUKHIN, SERGEJ N.          |
| E4  | 1     | AU=ZOLOTUKHIN, SERGEJ NIKOLAEVICH |
| E5  | 1     | AU=ZOLOTUKHIN, SERGEY F.          |
| E6  | 6     | AU=ZOLOTUKHIN, SF                 |
| E7  | 2     | AU=ZOLOTUKHIN, ST                 |
| E8  | 2     | AU=ZOLOTUKHIN, SV                 |
| E9  | 2     | AU=ZOLOTUKHIN, T. M.              |
| E10 | 2     | AU=ZOLOTUKHIN, V.                 |
| E11 | 51    | AU=ZOLOTUKHIN, V. A.              |
| E12 | 8     | AU=ZOLOTUKHIN, V. D.              |

Enter P or PAGE for more

? e au=zolotukhin sergei

| Ref | Items | Index-term             |
|-----|-------|------------------------|
| E1  | 85    | *AU=ZOLOTUKHIN SERGEI  |
| E2  | 2     | AU=ZOLOTUKHIN SERGEY F |
| E3  | 9     | AU=ZOLOTUKHIN SI       |
| E4  | 11    | AU=ZOLOTUKHIN SP       |
| E5  | 6     | AU=ZOLOTUKHIN ST       |
| E6  | 8     | AU=ZOLOTUKHIN SV       |
| E7  | 1     | AU=ZOLOTUKHIN SY       |
| E8  | 1     | AU=ZOLOTUKHIN SYU      |
| E9  | 2     | AU=ZOLOTUKHIN T A      |
| E10 | 1     | AU=ZOLOTUKHIN T E      |
| E11 | 4     | AU=ZOLOTUKHIN T F      |
| E12 | 1     | AU=ZOLOTUKHIN TE       |

Enter P or PAGE for more

? s e1 and AAV?

85 AU=ZOLOTUKHIN SERGEI  
20190 AAV?

S7 33 AU='ZOLOTUKHIN SERGEI' AND AAV?

? rd s7

>>>Duplicate detection is not supported for File 391.

>>>Records from unsupported files will be retained in the RD set.  
...completed examining records

S8 12 RD S7 (unique items)

? s s8 not py>2002

>>>One or more prefixes are unsupported

>>> or undefined in one or more files.

12 S8

19607638 PY>2002

S9 7 S8 NOT PY>2002

? d s9/3/1-7

Display 9/3/1 (Item 1 from file: 5)

DIALOG(R)File 5:Biosis Previews(R)

(c) 2005 BIOSIS. All rts. reserv.

0014094591 BIOSIS NO.: 200300053310  
Production and purification of serotype 1, 2, and 5 recombinant  
adeno-associated viral vectors.  
AUTHOR: **Zolotukhin Sergei**; Potter Mark; Zolotukhin Irene; Sakai  
Yoshihisa; Loiler Scott; Fraites Thomas J; Chiodo Vince A; Phillipsberg  
Tina; Muzyczka Nicholas; Hauswirth William W; Flotte Terance R; Byrne  
Barry J; Snyder Richard O (Reprint  
AUTHOR ADDRESS: Powell Gene Therapy Center, College of Medicine, University  
of Florida, 1600 SW Archer Road, Gainesville, FL, 32610-0266, USA\*\*USA  
AUTHOR E-MAIL ADDRESS: rsnyder@gtc.ufl.edu  
JOURNAL: Methods (Orlando) 28 (2): p158-167 October 2002 2002  
MEDIUM: print  
ISSN: 1046-2023 (ISSN print)  
DOCUMENT TYPE: Article  
RECORD TYPE: Abstract  
LANGUAGE: English

- end of record -

?

Display 9/3/2 (Item 2 from file: 5)  
DIALOG(R)File 5:Biosis Previews(R)  
(c) 2005 BIOSIS. All rts. reserv.

0011726011 BIOSIS NO.: 199800520258  
Construction of recombinant adeno-associated virus (AAV)  
BOOK TITLE: Methods in Molecular Medicine; Hepatitis C protocols  
AUTHOR: Reiser Markus (Reprint); **Zolotukhin Sergei**  
BOOK AUTHOR/EDITOR: Lau J Y-N (Editor)  
AUTHOR ADDRESS: Med. Universitaetsklin., Knappschatzkrankenhaus, Bochum,  
Germany\*\*Germany  
SERIES TITLE: Methods in Molecular Medicine 19 p533-538 1998  
MEDIUM: print  
BOOK PUBLISHER: Humana Press Inc. {a}, Suite 808, 999 Riverview Drive,  
Totowa, New Jersey 07512, USA  
ISBN: 0-89603-521-2  
DOCUMENT TYPE: Book; Book Chapter  
RECORD TYPE: Citation  
LANGUAGE: English

- end of record -

?

Display 9/3/3 (Item 3 from file: 5)  
DIALOG(R)File 5:Biosis Previews(R)  
(c) 2005 BIOSIS. All rts. reserv.

0011253087 BIOSIS NO.: 199800047334  
Green fluorescent protein as a reporter for gene transfer studies in the  
cochlea  
AUTHOR: Lalwani Anil K (Reprint); Han Jay J; Walsh Bong J; **Zolotukhin  
Sergei**; Muzyczka Nicholas; Mhatre Anand N  
AUTHOR ADDRESS: Lab. Molecular Otol., Epstein Lab., Dep. Otolaryngol.-Head  
Neck Surg., Univ. Calif. San Francisco, 350 Parnassus Ave., Suite 210,  
San Francisco, CA 94117, USA\*\*USA  
JOURNAL: Hearing Research 114 (1-2): p139-147 Dec., 1997 1997  
MEDIUM: print  
ISSN: 0378-5955  
DOCUMENT TYPE: Article  
RECORD TYPE: Abstract  
LANGUAGE: English

- end of record -

?

Display 9/3/4 (Item 4 from file: 5)  
DIALOG(R)File 5:Biosis Previews(R)  
(c) 2005 BIOSIS. All rts. reserv.

0011179430 BIOSIS NO.: 199799813490  
Recombinant adeno-associated virus type 2 replication and packaging is

. entirely supported by a herpes simplex virus type 1 amplicon expressing  
rep and cap  
AUTHOR: Conway James E; **Zolotukhin Sergei**; Muzyczka Nicholas; Hayward  
Gary S; Byrne Barry J (Reprint  
AUTHOR ADDRESS: Dep. Mol. Genetics Microbiol., Gene Therapy Cent.,  
University Florida, PO Box 100296, Gainesville, FL 32610-0296, USA\*\*USA  
JOURNAL: Journal of Virology 71 (11): p8780-8789 1997 1997  
ISSN: 0022-538X  
DOCUMENT TYPE: Article  
RECORD TYPE: Abstract  
LANGUAGE: English

- end of record -

?

Display 9/3/5 (Item 5 from file: 5)  
DIALOG(R)File 5:Biosis Previews(R)  
(c) 2005 BIOSIS. All rts. reserv.

0011009999 BIOSIS NO.: 199799644059  
Efficient photoreceptor-targeted gene expression in vivo by recombinant  
adeno-associated virus  
AUTHOR: Flannery John G (Reprint); **Zolotukhin Sergei**; Vaquero M  
Isabel; Lavail Matthew M; Muzyczka Nicholas; Hauswirth William W  
AUTHOR ADDRESS: Sch. Optometry Neuroscience Group, Univ. California,  
Berkeley, CA 94720, USA\*\*USA  
JOURNAL: Proceedings of the National Academy of Sciences of the United  
States of America 94 (13): p6916-6921 1997 1997  
ISSN: 0027-8424  
DOCUMENT TYPE: Article  
RECORD TYPE: Abstract  
LANGUAGE: English

- end of record -

?

Display 9/3/6 (Item 6 from file: 5)  
DIALOG(R)File 5:Biosis Previews(R)  
(c) 2005 BIOSIS. All rts. reserv.

0010868576 BIOSIS NO.: 199799502636  
Characterization of recombinant adeno-associated virus-2 as a vehicle for  
gene delivery and expression into vascular cells  
AUTHOR: Gnatenko Dmitri (Reprint); Arnold Thomas E; **Zolotukhin Sergei**  
; Nuovo Gerard J; Muzyczka Nicholas; Bahou Wadie F  
AUTHOR ADDRESS: Div. Hematol., HSCT15-040 SUNY, Stony Brook, NY 11794-8151,  
USA\*\*USA  
JOURNAL: Journal of Investigative Medicine 45 (2): p87-98 1997 1997  
ISSN: 1081-5589  
DOCUMENT TYPE: Article  
RECORD TYPE: Abstract  
LANGUAGE: English

- end of record -

?

Display 9/3/7 (Item 7 from file: 5)  
DIALOG(R)File 5:Biosis Previews(R)  
(c) 2005 BIOSIS. All rts. reserv.

0010259090 BIOSIS NO.: 199698726923  
Sequence requirements for binding of Rep68 to the adeno-associated virus  
terminal repeats  
AUTHOR: Ryan John H; **Zolotukhin Sergei**; Muzyczka Nicholas (Reprint  
AUTHOR ADDRESS: Dep. Mol. Genet. Microbiol., Coll. Medicine, Univ. Fla.,  
P.O. Box 100266 JHMHSC, Gainesville, FL 32610, USA\*\*USA  
JOURNAL: Journal of Virology 70 (3): p1542-1553 1996 1996  
ISSN: 0022-538X  
DOCUMENT TYPE: Article  
RECORD TYPE: Abstract  
LANGUAGE: English

- end of record -

?  
?  
?